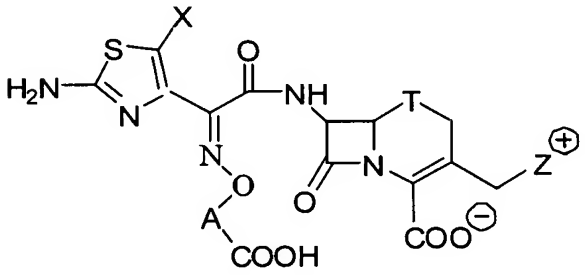
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of the formula (I):



(I)

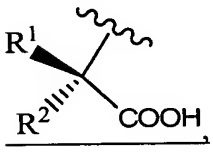
, an ester, a pharmaceutically acceptable salt or solvate thereof or a compound of the formula (I) in which the amino group on the thiazole at the 7-position is optionally protected,

~~(wherein,~~ wherein

T is S or SO~~, SO or O~~;

X is halogen, CN, carbamoyl optionally substituted with lower alkyl, lower alkyl, lower alkoxy, or lower alkylthio;

A-COOH ~~is~~ has the formula:



wherein R^1 is hydrogen and R^2 is lower alkyl,~~substituted lower alkylene (wherein the substituent is optionally substituted mono lower alkyl, optionally substituted lower alkylidene, or optionally substituted lower alkylene)~~;

Z^+ is an optionally substituted~~, a cation and an~~ cationic N atom-containing heterocyclic group~~), ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

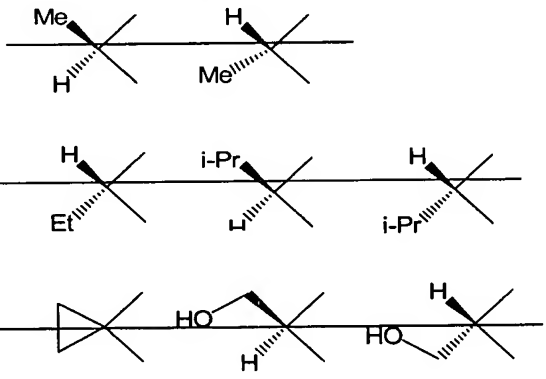
2. (Currently Amended) A compound according to claim 1, wherein T is S, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

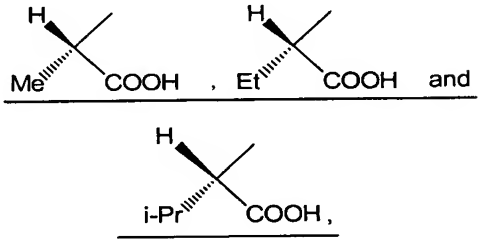
3. (Cancelled)

4. (Currently Amended) A compound according to claim 1, wherein X is halogen or lower alkyl~~, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

5. (Cancelled)

6. (Currently Amended) A compound according to claim 1[[5]], wherein A-COOH has a formula selected from ~~is a divalent group of any of the following formulae, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof.~~





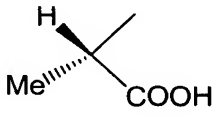
wherein Me is methyl; Et is ethyl and i-Pr is isopropyl.

~~(wherein, Me is methyl ; Et is ethyl ; i-Pr is isopropyl)~~

7. (Cancelled)

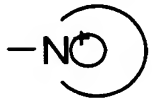
8. (Currently Amended) A compound according to claim [[5]] 1, wherein ~~R^1 and~~ R^2 is ~~are different each other and independently hydrogen or~~ methyl~~, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

9. (Currently Amended) A compound according to claim [[5]], wherein ~~"-□-COOH" is a group of~~ A-COOH has the formula:



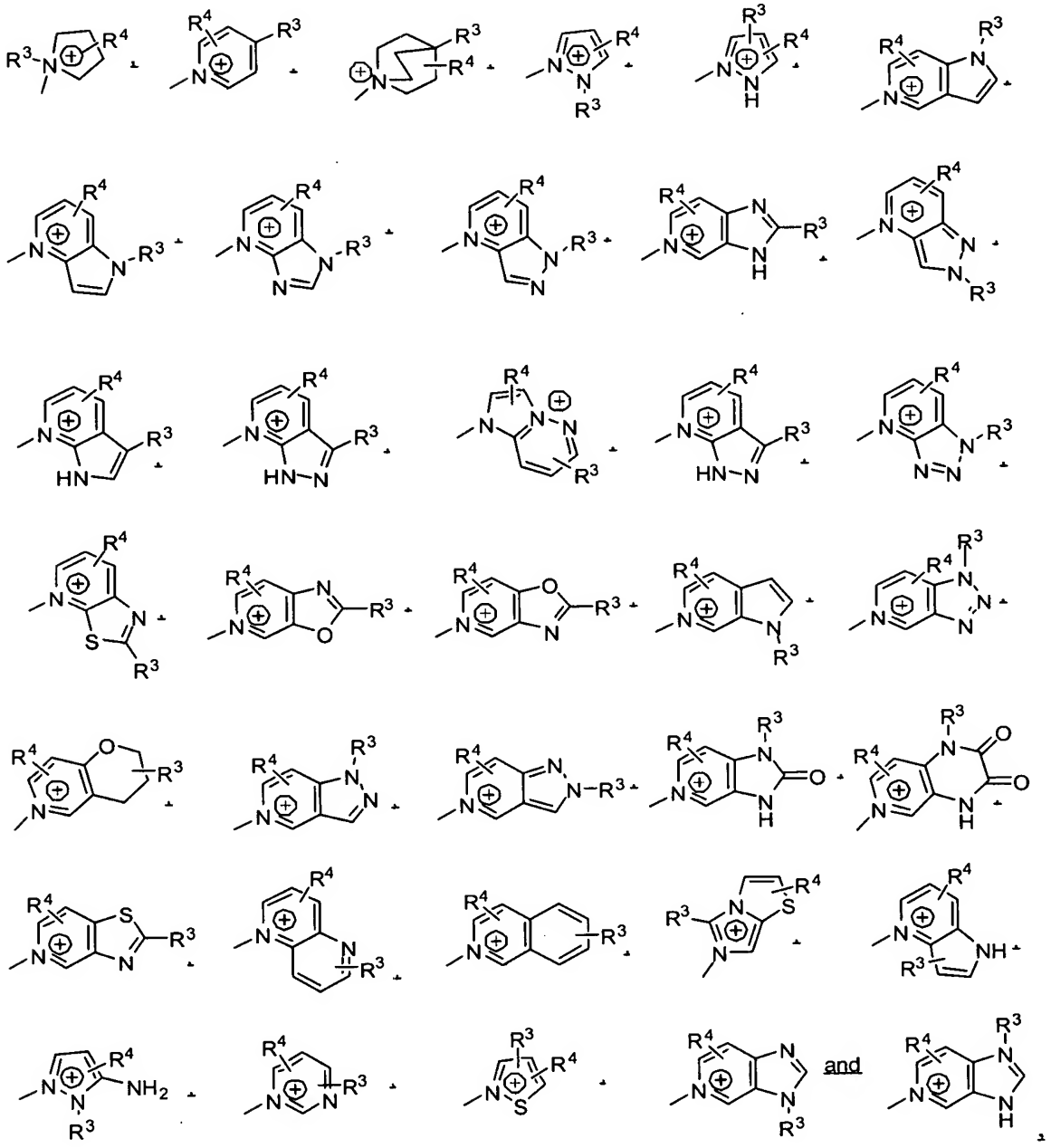
~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

10. (Currently Amended) A compound according to claim 1, wherein Z^+ is a saturated or unsaturated, monocyclic or condensed cyclic, ~~and one or more of N atom-containing~~ quarternary ammonium group of the formula:



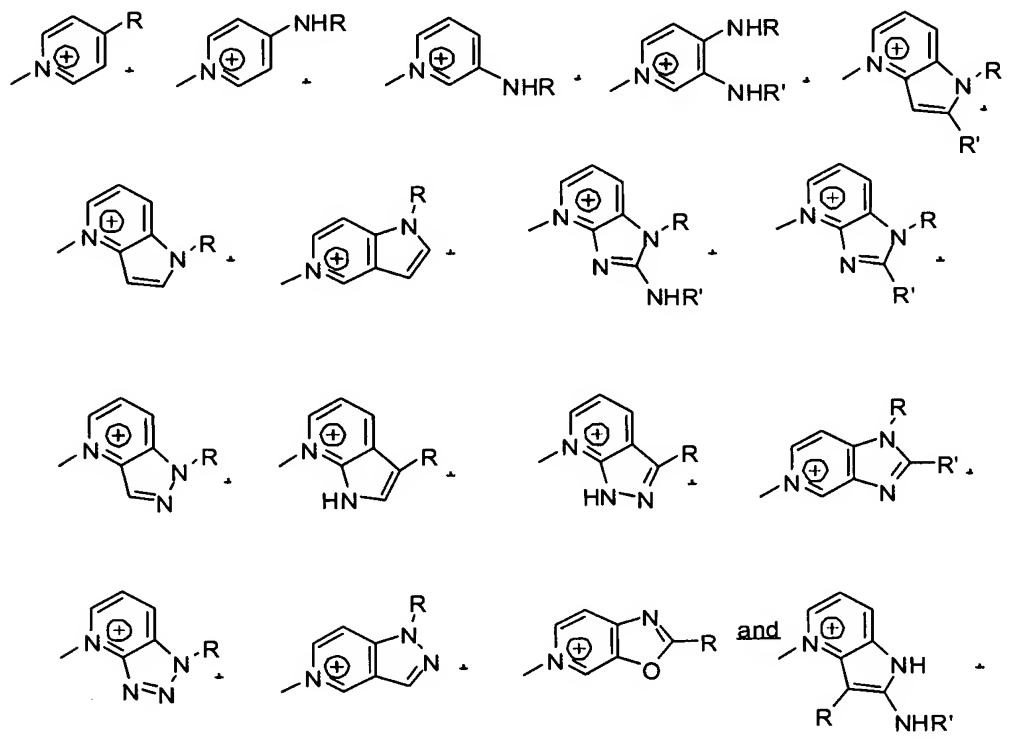
which contains one or more N atoms and optionally substituted with ~~may have~~ 1 to 4 substituents~~, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

11. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~, wherein Z^+ is a heterocyclic group having a formula selected from~~of any one of the formulae~~:



~~(wherein,~~ wherein R^3 and R^4 are each ~~is~~ independently selected from hydrogen, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted lower alkenyl, optionally substituted amino, hydroxy, halogen, optionally substituted carbamoyl, optionally substituted alkyloxy, and ~~or~~ optionally substituted heterocyclic group.[[)]]

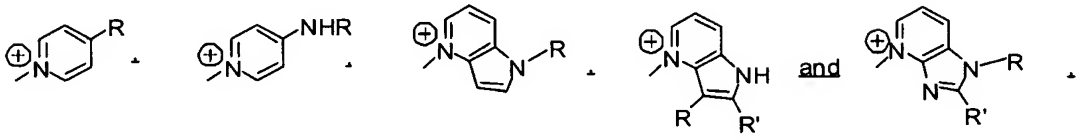
12. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof,~~ wherein Z^+ is a heterocyclic group having a formula selected from ~~of any one of the formulae~~:



~~(wherein,~~ wherein R and R' are each ~~is~~ independently selected from hydrogen, lower alkyl, amino, mono- or di-lower alkylamino, lower alkenyl, amino lower alkyl, lower alkylamino lower alkyl, lower alkylamino lower alkylamino, amino lower alkyloxyamino, amino substitute with optionally substituted heterocyclic group, hydroxy lower alkyl, hydroxy lower alkylamino lower alkyl, lower alkoxy lower alkyl, carbamoyl lower alkyl, carboxy lower alkyl, lower alkylcarbonylamino lower alkyl, lower alkoxycarbonylamino lower alkyl, lower alkyloxy, ~~the other various optionally substituted lower alkyl,~~ lower alkyl having 2 kinds of substituents, ~~or~~ and optionally substituted heterocyclic ~~substitutedheterocyclic~~ group.[[)]]

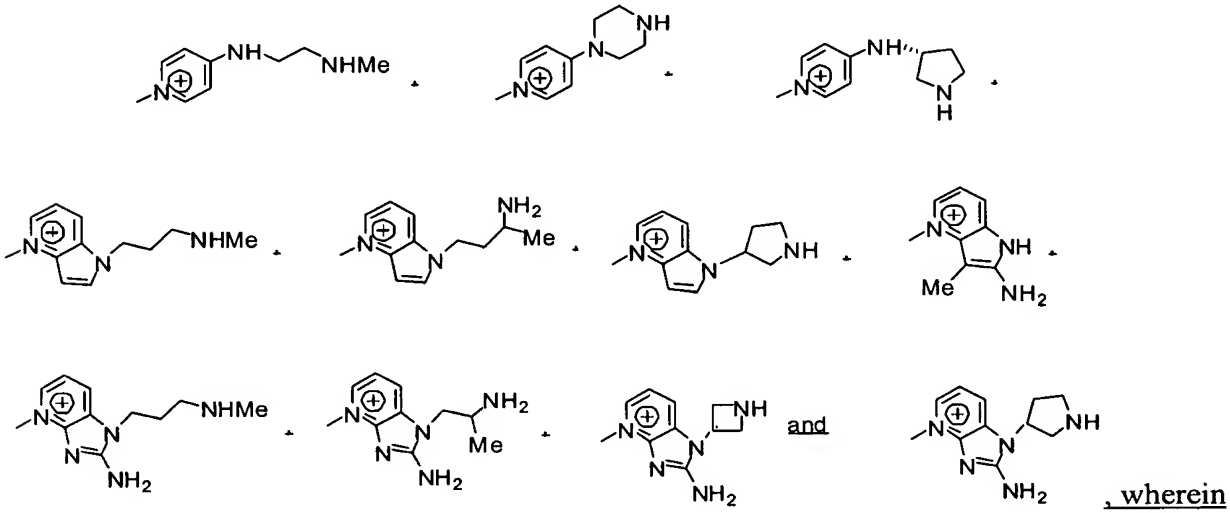
13. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or~~

~~pharmaceutically acceptable salt or solvate thereof~~, wherein Z^+ is a heterocyclic group having a formula selected from ~~of any one of the formulae~~:



~~(wherein,~~ wherein R is ~~independently~~ hydrogen, lower alkyl, amino lower alkyl, lower alkylamino lower alkyl, amino substituted with optionally substituted heterocyclic group, or optionally substituted heterocyclic ~~substitutedheterocyclic~~ group[[;]]and R'is amino. [[)]]

14. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof,~~ wherein Z^+ is a heterocyclic group having a formula selected from ~~of any one of the formulae~~:

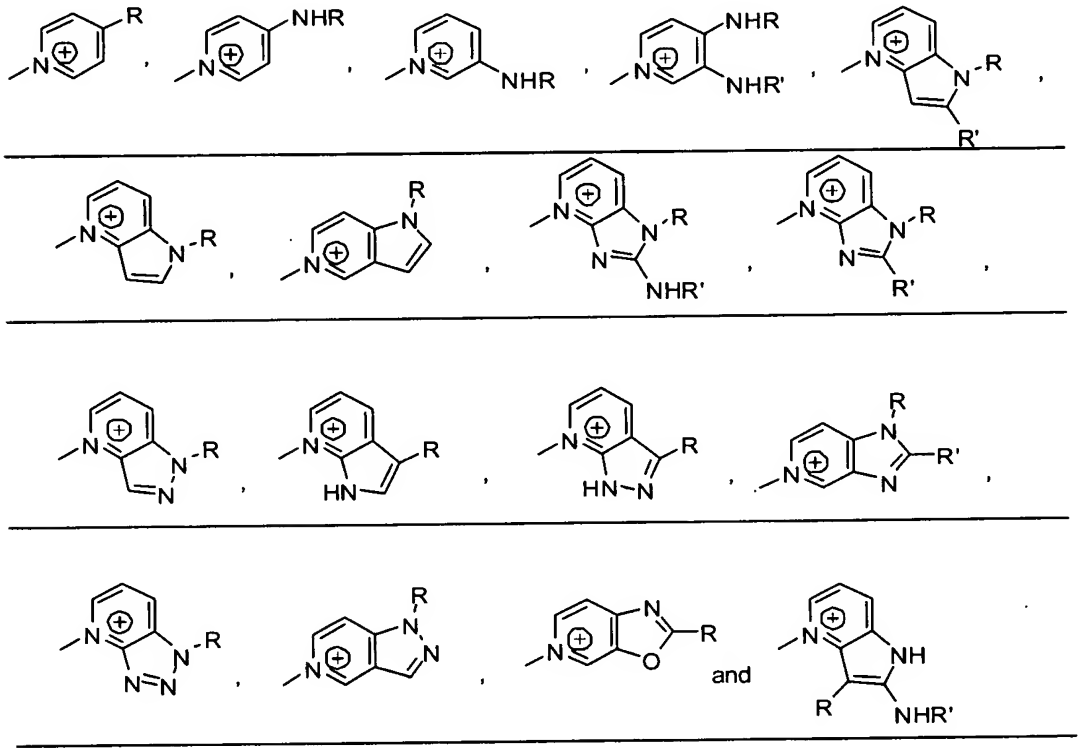


Me is methyl.

~~(wherein, Me is methyl.)~~

15. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof,~~ wherein T is S and [[;]]X is halogen ~~; A is a divalent group shown in any of claims 5 to 9 ; Z^+ is a heterocyclic group shown in any of claims 1 to 14~~.

16. (Currently Amended) A compound according to claim 1, ~~ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof,~~ wherein T is S ; X is halogen; R^2 is methyl~~; A is a divalent group shown in claim 8~~ ; and Z^+ is a heterocyclic group group having a formula selected from

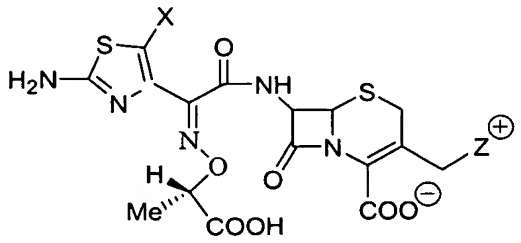


wherein R and R' are each independently selected from hydrogen, lower alkyl, amino, mono- or di-lower alkylamino, lower alkenyl, amino lower alkyl, lower alkylamino lower alkyl, lower alkylamino lower alkylamino, amino lower alkyloxyamino, amino substitute with

optionally substituted heterocyclic group, hydroxy lower alkyl, hydroxy lower alkylamino lower alkyl, lower alkoxy lower alkyl, carbamoyl lower alkyl, carboxy lower alkyl, lower alkylcarbonylamino lower alkyl, lower alkoxycarbonylamino lower alkyl, lower alkyloxy, lower alkyl having 2 kinds of substituents, and optionally substituted heterocyclic group ~~shown in claim 12~~.

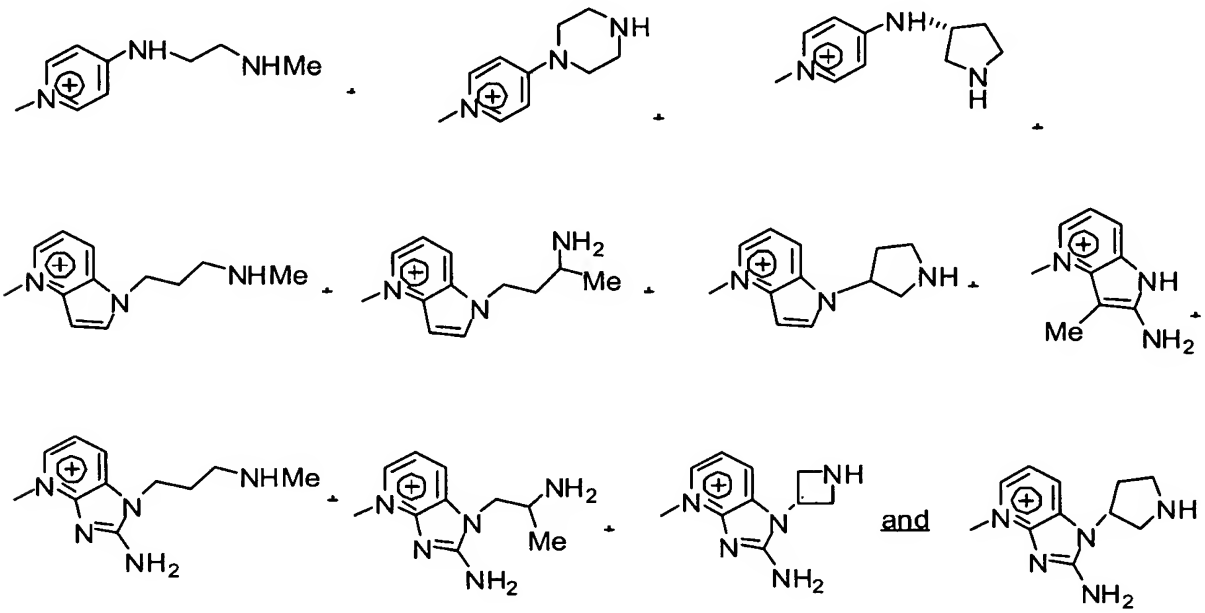
17. (Cancelled)

18. (Currently Amended) A compound according to claim 1~~, of~~ having the following formula, or a pharmaceutically acceptable salt or a solvate thereof:[[.]]



(I)

[[(]]wherein[[,]] X is halogen ; Z^+ is a heterocyclic group selected from~~of any of the formulae)~~



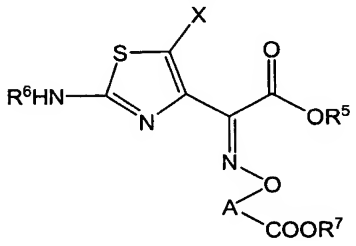
~~(wherein, Me is methyl)~~ wherein Me is methyl.

19-21. (Cancelled)

22. (Currently Amended) A pharmaceutical composition containing ~~a~~ the compound of claim 1~~, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate thereof~~.

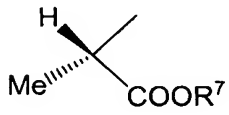
23. (Currently Amended) An antibacterial composition containing ~~a~~ the compound of claim 1~~, ester, amino-protected compound wherein the amino bonds to a thiazole ring at the 7-position, or pharmaceutically acceptable salt or solvate~~.

24. (Withdrawn) A compound or pharmaceutically acceptable salt, of the formula:



(IV)

(wherein, X is halogen, CN, carbamoyl optionally substituted with lower alkyl, lower alkyl, lower alkoxy, or lower alkylthio ; A is of the formula:



R^5 is hydrogen or carboxy-protecting group ; R^6 is hydrogen or amino-protecting group ; R^7 is hydrogen or carboxy-protecting group)

25. (Withdrawn) A compound or pharmaceutically acceptable salt according to claim 24, wherein X is halogen or lower alkyl.

26 (Withdrawn) A compound or pharmaceutically acceptable salt according to claim 24, wherein X is halogen.